

FIG. 1A-1

FIG. 1A-2

FIG. 1A

GAATTCCCCAACAGAGCCCAAGCTCTCCATCTAGTGGACAGGGAAGCTAGCAGCAAACC

39 (UPPER: SEQ ID NO.: 1)  
19 (LOWER: SEQ ID NO.: 4)

TTCCCTTCACTACAAACTTCAATTGCTTGGCCAAAAGAGAGTTAATTCAATGTAGACAT

119  
39

CTATGTAGGCAATTAAAAACCTATTGATGTATATAAACAGTTTGCATTTCATGGAGGGCAAC

179  
59

TAAATACATTCTAGGACTTTATAAAGATCACTTTTATTATGCACAGGGTGAACAAG

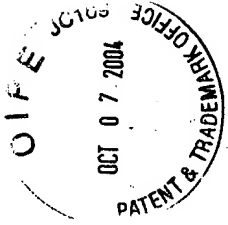
239  
79

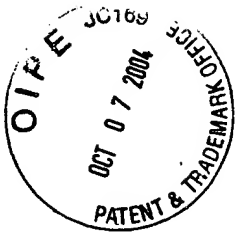
ATGGATTATCAAGTGTCAAGTCCAATCTATGACATCAATTATTATACATCGGAGCCCTGC  
M D Y Q V S S P I Y D I N Y Y T S E P C

299  
99

FIG. 1A-1

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CAAAAATCAATGTGAAGCAAAATCGCAGCCGCCCTCTGCTCGCTCTACTCAGTGGTG 359  
Q K I N V K Q I A A R L L P P L Y S L V 119

TTCACTCTTTGGTTTGTGGGCAACATGCTGGTCATCTCATCTGATAAACTGCAAAAGG 419  
F I F G F V G N M L V I L I L I N C K R 139

CTGAAGCATGACTGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTCCTT 479  
L K S M T D I Y L L N L A I S D L F F L 159

CTTACTGCCCCCTCTGGGCTCACTATGCTGCCGCCAGTGGGACTTTGGAAATACAATG 539  
L T V P F W A H Y A A A Q W D F G N T M 179

TGTCAACTCTTGACAGGCTCTATTTATAGGCTTCTCTCTGGAATCTTCTTCATCATC 599  
C Q L L T G L Y F I G F F S G I F F I I 199

CTCCTGACAATCGATAGGTACCTGGCTGTGCTCCATGCTGTGTTGCTTTAAAGCCAGG 659  
L L T I D R Y L A V V H A V F A L K A R 219

ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGTGGTGGCTGTGTTGCGTCT 719  
T V T F G V V T S V I T W V V A V F A S 239

CTCCAGGAATCATCTTTACCAGATCTCAAAAAGAGGTCTTCAATACACCTGCAGCTCT 779  
L P G I I F T R S Q K E G L H Y T C S S 259

CATTTTCCATACA  
H F P Y

FIG. 1A-2

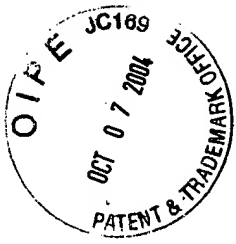


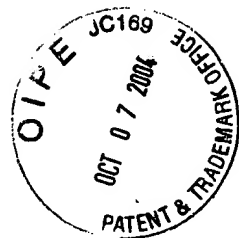
FIG. 1B-1
FIG. 1B-2

FIG. 1B

GAATTCCCCCAACAGAGCCAAAGCTCTCCATCTAGTGGACAGGAAGCTAGCAGCAAAACC	59 (UPPER: SEQ ID NO.: 2)
TTCCCTTCACTACAAAACCTTCATTGCTTGGCCAAAAGAGAGTTAATTCAATGTAGACAT	19 (LOWER: SEQ ID NO.: 5)
CTATGTAGGCAATTAAAAACCTATTGATGTATAAAACAGTTTGCATTTCATGGAGGGCAAC	119
TAAATACATTCTAGGACTTTATATAAAGATCACTTTTATTATGCACAGGGTGGAACAAG	39
ATGGATTATCAAGTGTCAAGTCCCAATCTATGACATCAATTATTATACATCGGAGCCCTGC	179
M D Y Q V S S P I Y D I N Y Y T S E P C	59
	239
	79
	299
	99

3/20

FIG. 1B-1



4/20

CAAAAATCAATGTGAAGCAAATCGCAGCCGCTCCTGCTCCGCTCTACTCACTGGTG 359  
Q K I N V K Q I A A R L L P P L Y S L V 119  
TTTCATCTTTGGTTTGTGGCAACATGCTGGTCATCCTCATCCTGATAAACTGCAAAAGG 419  
F I F G F V G N M L V I L I L I N C K R 139  
CTGAAGAGCATGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTCCTT 479  
L K S M T D I Y L L N L A I S D L F F L 159  
CTTACTGTCCCTTCTGGGCTCACTATGCTGCCGCCAGTGGGACTTTGGAAATACAATG 539  
L T V P F W A H Y A A A Q W D F G N T M 179  
TGTCAACTCTTGACAGGGCTCTATTTTATAGGCTTCTTCTGGAATCTTCTTCATCATC 599  
C Q L L T G L Y F I G F F S G I F I I 199  
CTCCTGACAATCGATAGTACCTGGCTGTGCTGCCATGCTGTGTTGCTTTAAAGCCAGG 659  
L L T I D R Y L A V V H A V F A L K A R 219  
ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGTGGTGTGTTGCGTCT 719  
T V T F G V V T S V I T W V V A V F A S 239  
CTCCCAGGAATCACTTTACCAGATCTCAAAAGAAGGCTTCATTACACCTGCAGCTCT 779  
L P G I I F T R S Q K E G L H Y T C S S 259  
CATTTTCCATACAGTCAGTATCAATTCTGGAAGAATTTCCAGACATTAAGATAGTCATC 839  
H F P Y S Q Y Q F W K N F Q T L K I V I 279

FIG. 1B-2

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TTGGGCTGGTCCCTGCTGTGTCATGTGTCATCTGCTACTCGGAATCCTAAAACT 899  
 L G L V L P L L V M V I C Y S G I L K T 299  
 CTGCTTCGGTGTGAAATGAGAAAGAGGACAGGGCTGTGAGGCTTATCTTCACCATC 959  
 L L R C R N E K R H R A V R L I F T I 319  
 ATGATTGTTTATTCTCTCTGCGCTCCCTACAACATTGTCCTTCTCTCCTGAACACCTTC 1019  
 M I V Y F L F W A P Y N I V L L L N T F 339  
 CAGGAATCTTTGGCCTGAATAATTGCAGTAGCTCTAACAGGTTGGACCAAGCTATGCAG 1079  
 Q E F G L N N C S S S N R L D Q A M Q 359  
 GTGACAGAGACTCTTGGGATGACGCACTGTGCAATCAACCCCATCATCTATGCCTTTGTC 1139  
 V T E T L G M T H C C I N P I I Y A F V 379  
 GGGGAGAAGTTCAGAAACTACCTCTTAGTCTTCTTCCAAAAGCACATTGCCAAACGCTTC 1199  
 G E K F R N Y L L V F F Q K H I A K R F 399  
 TGCAAATGCTGTCTATTTCCAGCAAGAGGCTCCCGAGCGAGCAAGCTCAGTTTACACC 1259  
 C K C C S I F Q Q E A P E R A S S V Y T 419  
 CGATCCACTGGGAGCAGGAAATATCTGTGGGCTTGTGACACGGACTCAAGTGGGCTGGT 1319  
 R S T G E Q E I S V G L \* 439  
 GACCCAGTCAGAGTTGTGCACATGGCTTAGTTTTTCATACACAGCCTGGGCTGGGGTNGG 1379  
 TTGNNAGGTCTTTTTTAAAGGAAGTTACTGTATTAGAGGGTCTAAGATTCAATCCATT 459  
 1439  
 479  
 TATTGGCATCTGTTTAAAGTAGATTAGATCCGAATTC

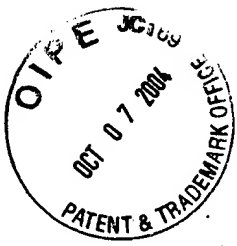
FIG. 1B-3

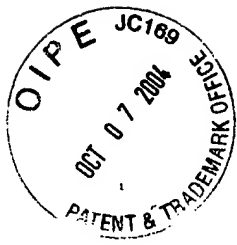
FIG. 1D-1
FIG. 1D-2

FIG. 1D

GAATTC	59 (UPPER: SEQ ID NO. 3)
CCCCCA	19 (LOWER: SEQ ID NO. 6)
GAGCC	
AGCTCT	
CCATCT	
AGTGG	
ACAGG	
GAAGT	
AGCAG	
CAAAACC	
TTCCCT	119
CACTACA	39
AAACTT	
CATTG	
CTTGCC	
CAAAAG	
AGAGT	
TAATT	
CAATG	
TAGAC	
AT	
CTATG	179
TAGGCA	59
ATTAA	
AAACCT	
ATTGAT	
GTATA	
AAACAG	
TTTGC	
ATTCT	
ATGAG	
GGCAAC	
TAAAT	239
CATTCT	79
AGGACT	
TTATA	
AAAGAT	
CACCTT	
TTTATT	
TATGC	
ACAGG	
TGGAA	
CAACAG	
ATGGAT	299
TATCA	99
AGTG	
CAAGT	
CAATCT	
TATG	
ACATCA	
ATTATT	
TATACA	
TCGG	
AGCC	
CTGC	
M D Y Q V S S P I Y D I N Y Y T S E P C	

FIG. 1D-1





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CAAAAATCAATGTGAAGCAAAATGCAGCCCGCTCCTGCCTCCGCTCTACTACTGGTG 359  
Q K I N V K Q I A A R L L P P L Y S L V 119

TTTATCTTTGGTTTGTGGGCAACATGTGTGTCATCCTCATCCTGATAAACTGCCAAAAGG 419  
F I F G F V G N M L V I L I L I N C K R 139

CTGAAGAGCATGACATGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTCCTT 479  
L K S M T D I Y L L N L A I S D L F L 159

CTTACTGTCCCTTCTGGGCTCACTATGTCTGCCGCCAGTGGGACTTTGGAAATACATG 539  
L T V P F W A H Y A A A Q W D F G N T M 179

TGTCAACTCTTGACAGGGCTCTATTTTATAGGCTTCTCTGGAATCTTCTTCATCATC 599  
C Q L L T G L Y F I G F F S G I F I I 199

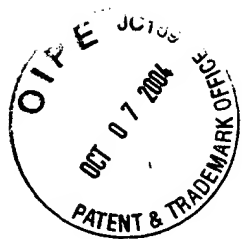
CTCCTGACAAATCGATAGGTACCTGGCTGTCGTCATGCTGTGTTGCTTTAAAGCCAGG 659  
L L T I D R Y L A V V H A V F A L K A R 219

ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCATTGGGTGGTGGCTGTGTGGCTCT 719  
T V T F G V V T S V I T W V V A V F A S 239

CTCCCAGGAATCATCTTTACCAGATCTCAAAAGAAGGTCTTCAATACACCTGCAGCTCT 779  
L P G I I F T R S Q K E G L H Y T C S S 259

CATTTCCATACATTAAAGATAGTCATCTTGGGGTGGTCCCTGCCGCTGCTGTGTCATGGT 839  
H F P Y I K D S H L G A G P A A C H G 279

FIG. 1D-2



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CATCTGCTACTCGGGAATCCTAAAACTCTGCTTCGGTGTGCAATGAGAAGAAGAGGCA 899  
H L L L G N P K N S A S V S K \* 299  
CAGGGCTGTGAGGCTTATCTTCACCATCATGATGTGTTAATTTCTCTTCCTGGGCTCCCTA 959  
319  
CAACATTGTCCCTTCTCCTGAACACCTTCCAGGAATTCCTTTGGCCTGAATAATTGCAGTAG 1019  
339  
CTCTAACAGGTTGGACCAAGCTATGCAGGTGACAGAGACTCTTGGGATGACGCACCTGCTG 1079  
359  
CATCAACCCCATCATCTATGCCTTGTGCGGGAGAAAGTTCAGAACTACCTCTTAGTCTT 1139  
379  
CTTCCAAAAGCACATTGCCAAACCGCTTCTGCAAAATGCTGTCTATTTTCCAGCAAGAGGC 1199  
399  
TCCCCGAGGAGCAAGCTCAGTTTACACCCGATCCACTGGGGAGCAGGAAATATCTGTGGG 1259  
419  
CTTGTGACACGGACTCAAGTGGGCTGGTGACCCAGTCAGAGTTGTGCACATGGCTTAGTT 1319  
439  
TTCATACACAGCCCTGGGCTGGGGTNGGTGGNNGAGGCTCTTTTAAAGGAAGTTACT 1379  
459  
GTTATAGAGGGTCTAAGATTTCATCCATTATTTTGGCATCTGTGTTAAAGTAGATTAGATCC 1439  
479  
GAATTC

FIG. 1D-3



FIG. 2A
FIG. 2B

FIG. 2

CCR5	1	MDYQVSSP	DINVTSEPCOK	INVKQIAARLL	PPLYSLVFIFGVGNMLVIL	LINCKRLKSM	TDIYLLNLAISD	IFFLIT	83				
hCC-R2b	6	MLSTSRSR	FIRNTNESGEEV	TTFFDYDYGAPCHKEF	VKQICAGLL	PPLYSLVFIFGVGNMLVIL	LINCKRLKCL	TDIYLLNLAISD	LFLLIT	95			
hCC-R3		MTTSLD	TVETFGTTSY	DDVGLIOEKAD	TRALMAQFV	PPLYSLVFTVGLIGNV	VMILIKYRRIRI	MTNIIYLLNLAISD	LLFLVT	87			
hCC-R1		METPNTT	EDYDTTTEFD	YGDA	TPCOKMNERAF	GAQLLP	PPLYSLVFI	GVGNMLVIL	VIQVKRLKMT	SIYLLNLAISD	LLFLFT	87	
hCC-R4		MNPTDI	ADTTLDES	IYSNYY	LYESIPKPTKEG	IKAFGELF	LPPLYSLVF	FGLLGN	SWVVLV	FKYKRIR	SMTDVYLLNLAISD	LLFVFS	92

III

IV

CCR5

hcc-R2b

hcc-R3

hcc-R1

hcc-R4

VPFWAHYA

ANQWDFGN

IMCQLLT

GLYFIG

FFSGIFF

FIILLT

IDRYLA

VH

AVFALKART

VTFGVVTSVITW

VAVFASL

PGIIFTR

SQKEGLH

177

LPLWAHSA

ANQWDFGN

IMCQLLT

GLYFIG

FFSGIFF

FIILLT

IDRYLA

IV

HAVFALKART

VTFGVVTSVITW

VAVFASL

PGIIFTR

SQKEGDSV

189

LPFWHYVR

GHNMVFGH

GCNLLSGF

YHTGLYSEI

FFIILLT

IDRYLA

IV

HAVFAIR

PARVTFGVITS

VTFWGLAV

IAALPEF

IFVETEEL

FEE

182

LPFWIDY

KLKDDW

VFGDAM

CKILLSGF

YHTGLYSEI

FFIILLT

IDRYLA

IV

HAVFAIR

PARVTFGVITS

IIWALAI

IASMPGLY

FSKTQ

WEFTH

182

LPFWGNYA

ANQWDFGL

IGKMSI

WMLVGF

SGIFF

FWMLMS

IDRYLA

IV

HAVFS

LRARTITV

GVITS

LATWS

VAVFASL

PGIIFTR

STCYTERNH

186

FIG. 2A

V

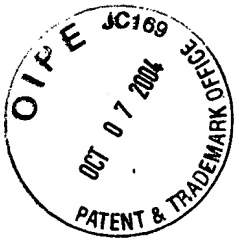
V

CCR5 YTCSSHPYSQYQF WKNFQTLKIV ILGLVPLLLVMVICYSGLKTLRCRNEKRRRAVRLLFTIMIVYFLFWA PYNIVLLNTFQEFFGLNNC 272  
hcc-R2b MCGPYFPRG... WNNFHTIMRNILGLVPLLLMVICYSGLKTLRCRNEKRRRAVRLLFTIMIVYFLFWA PYNIVLLNTFQEFFGLNNC 280  
hcc-R3 TLCSALYPEDTVYSWRHHTIRMTIFCLVPLLLVMVICYSGLKTLRCRNEKRRRAVRLLFTIMIVYFLFWA PYNIVLLNTFQEFFGLNNC 276  
hcc-R1 HTCSLHFPHESLREWKLFQALKLNLFGLVPLLLVMVICYSGLKTLRCRNEKRRRAVRLLFTIMIVYFLFWA PYNIVLLNTFQEFFGLNNC 276  
hcc-R4 TYCKTKYSLSNST.TWKVLSSSEINILGLVPLLLVMVICYSGLKTLRCRNEKRRRAVRLLFTIMIVYFLFWA PYNIVLLNTFQEFFGLNNC 279

VII

CCR5 SSSNRLLDOAMQVTTETLGMTHCCINPIIYAFVGEKFRNLLVFFOKHIAKR.FCKCCSIFQOEAPERASSVYTRSTGEQEHISVGL 352  
hcc-R2b ESTSQLDQATQVTTETLGMTHCCINPIIYAFVGEKFRNLLVFFOKHIAKR.FCKCCSIFQOEAPERASSVYTRSTGEQEHISVGL 360  
hcc-R3 ERSKHLDMIVTEVIAYSCHCCMNPVIYAFVGEKFRNLLVFFOKHIAKR.FCKCCSIFQOEAPERASSVYTRSTGEQEHISVGL 355  
hcc-R1 EQSRHLDLAVQVTEVIAYTHCCWNPVIYAFVGEKFRNLLVFFOKHIAKR.FCKCCSIFQOEAPERASSVYTRSTGEQEHISVGL 355  
hcc-R4 TFERYLDVAVQVTEVIAYTHCCWNPVIYAFVGEKFRNLLVFFOKHIAKR.FCKCCSIFQOEAPERASSVYTRSTGEQEHISVGL 360

FIG. 2B



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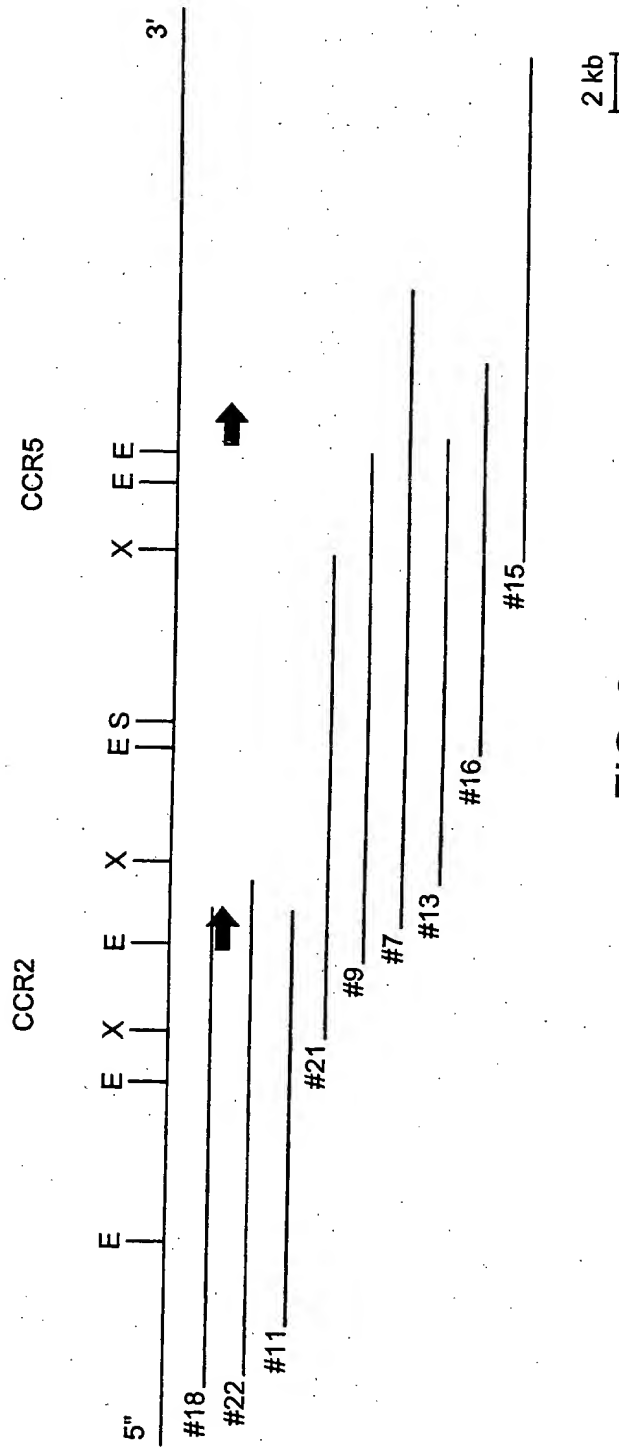


FIG. 3

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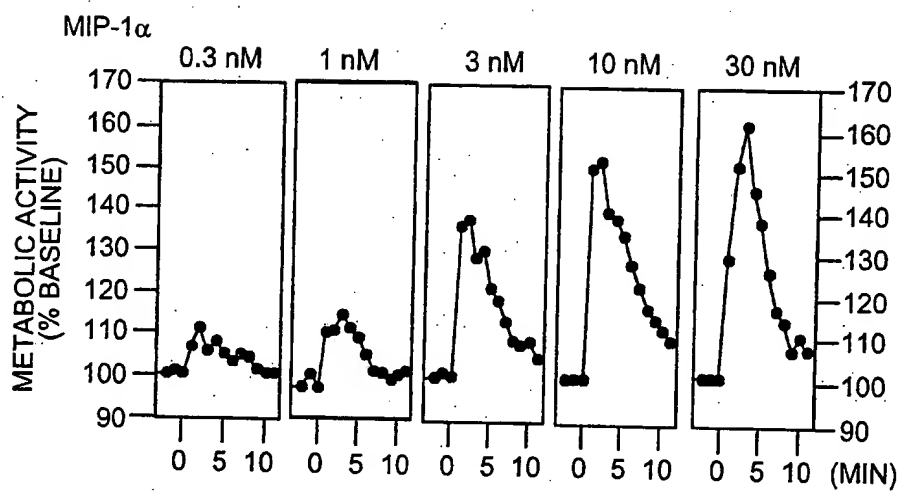


FIG. 4A

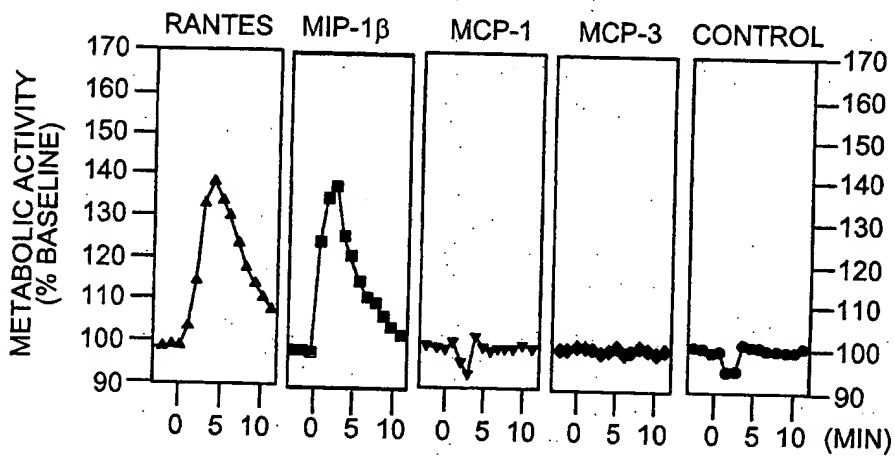


FIG. 4B

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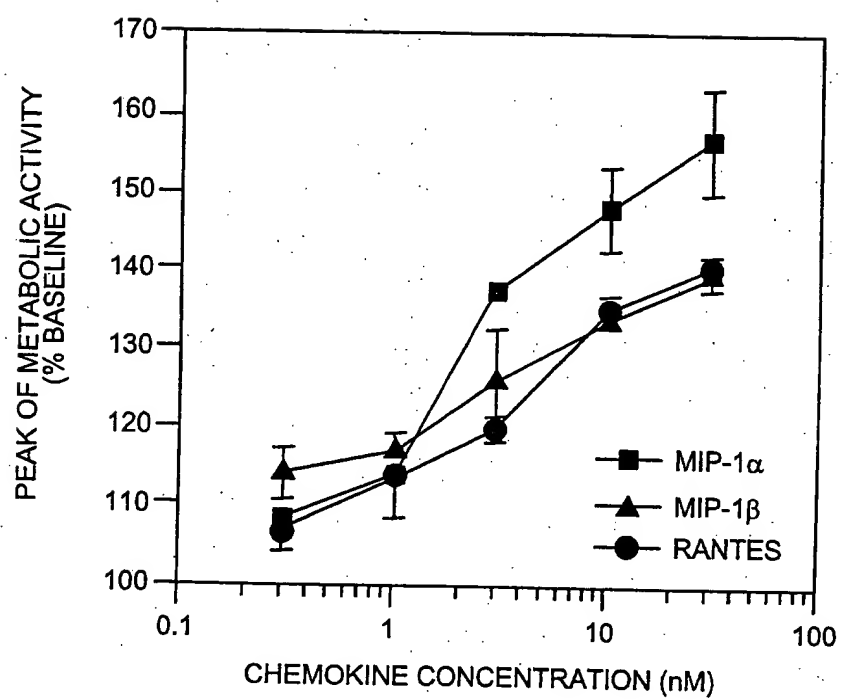


FIG. 4C

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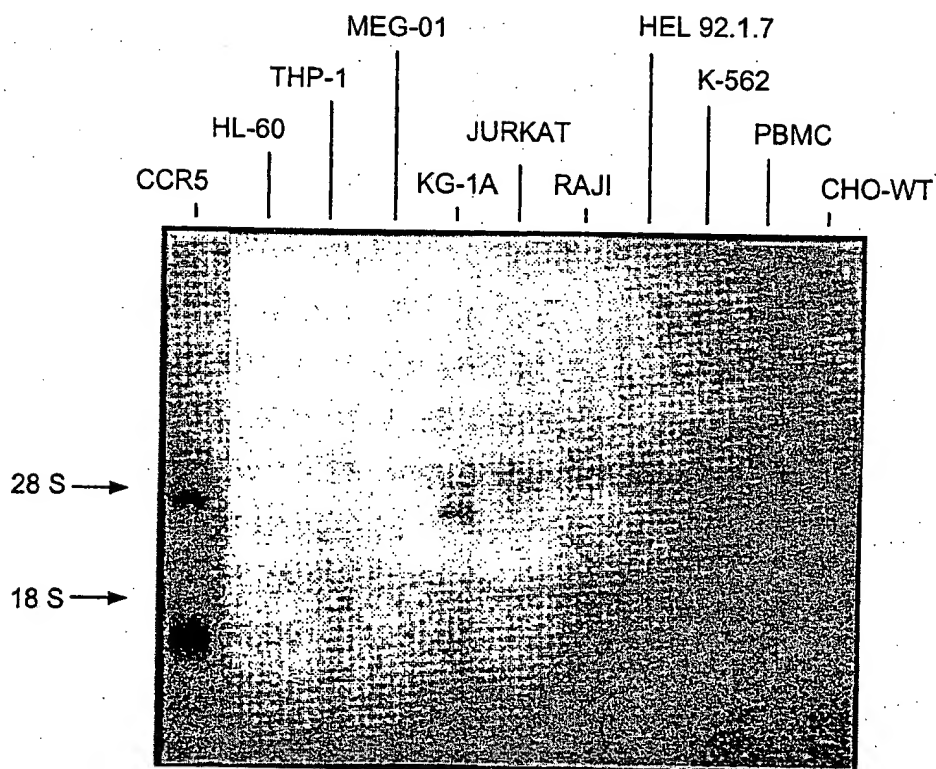


FIG. 5



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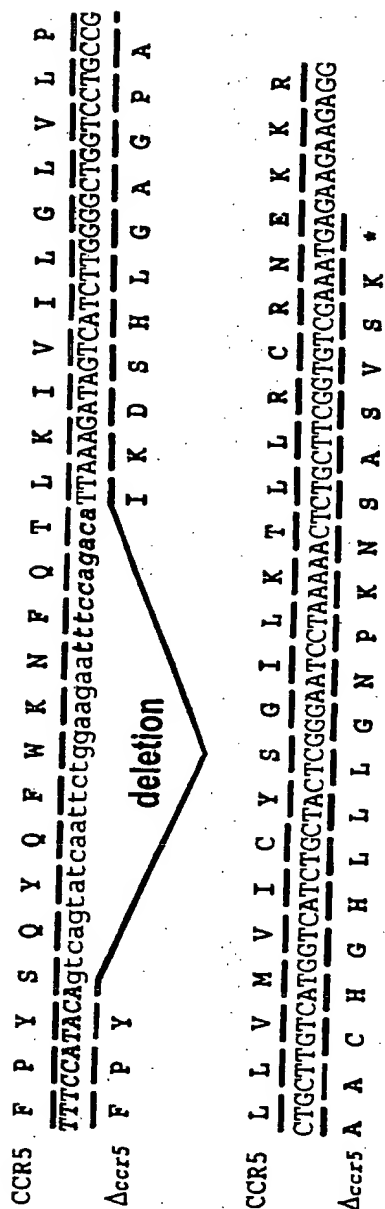


FIG. 6B



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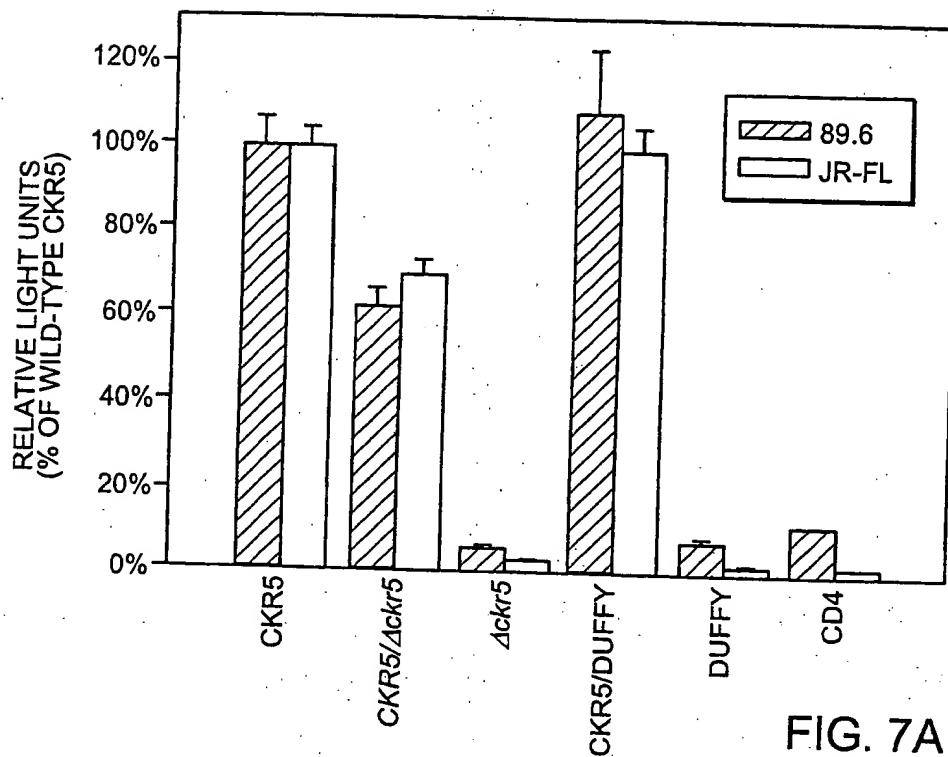


FIG. 7A

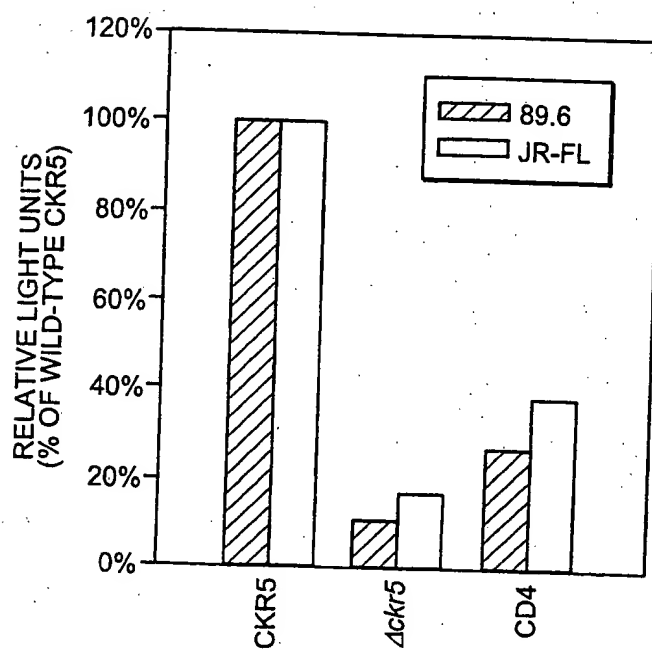


FIG. 7B

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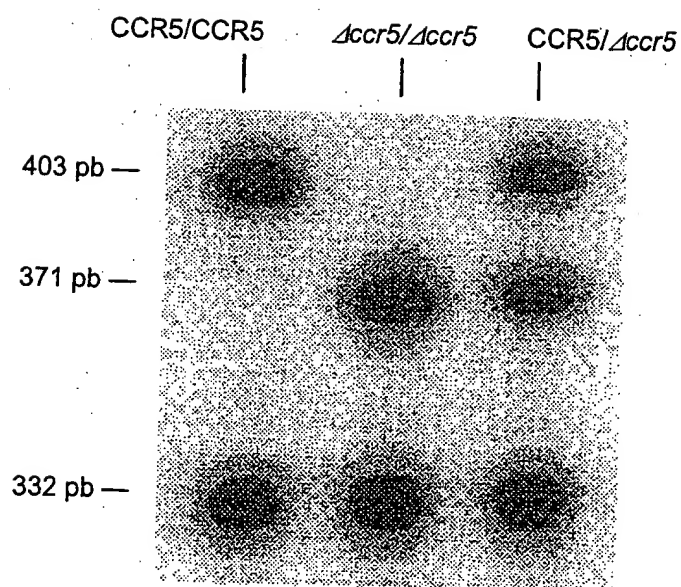
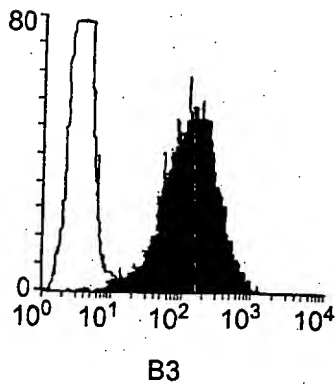
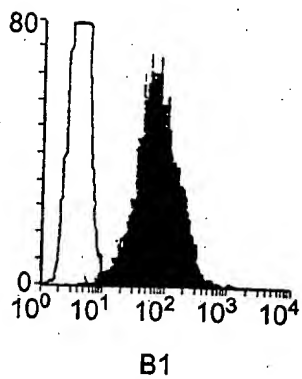
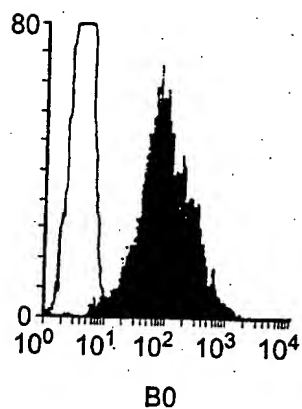
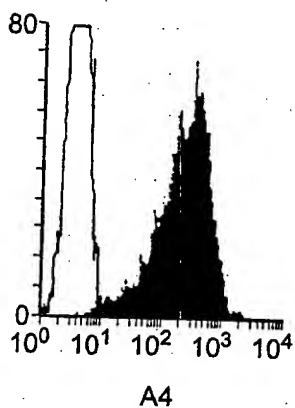
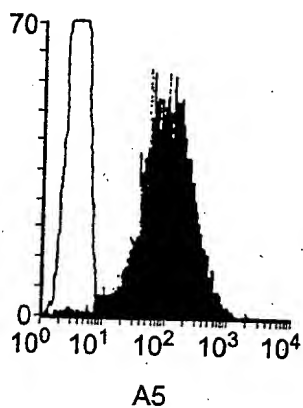
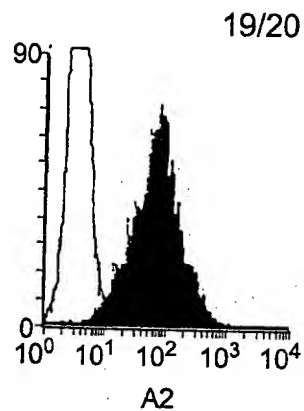
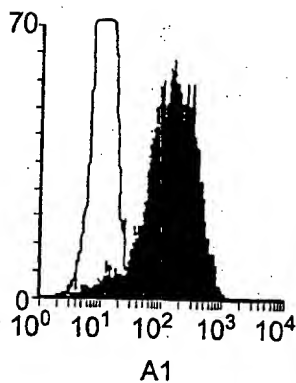
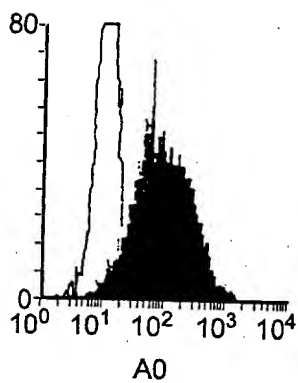


FIG. 8



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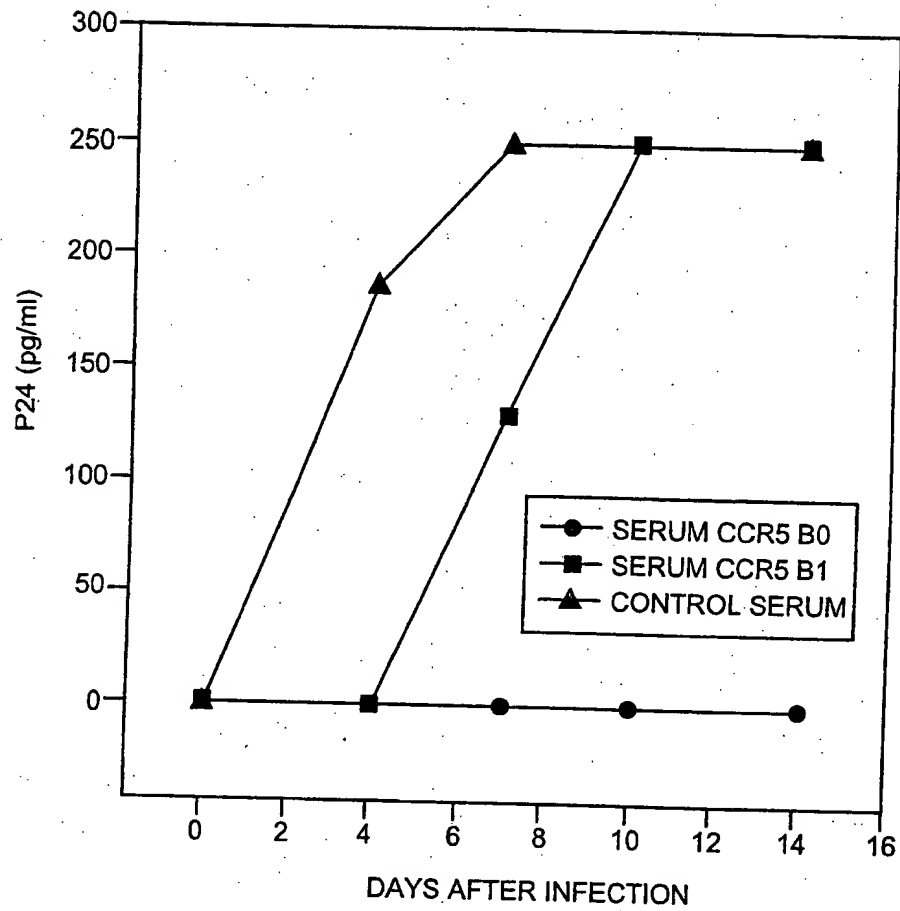


FIG. 10

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